

Product datasheet for MR226998

Nodal (NM_013611) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nodal (NM_013611) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nodal
Synonyms:	Tg.413d
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226998 representing NM_013611 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGCCACAGCCTCCGCATCCTTCTTCTTCAAGCCTGTTGGGCTCTACTCCACCCGCGGCCCGA
CCGCGGCCGCTTTGCCTCTGTGGACACGGGGCAGCCCTCGTCACCGTCCCCTCTGGCGTACATGTTGAG
CCTCTACCGAGACCCGCTGCCTCGGGCGGACATCATCCGAGCCTCCAGGCGCAAGATGTGGACGTGACC
GGACAGAAGTGGACTTTACGTTTGACTTCTCTTTTTGAGCCAAGAAGAGGATCTGGTATGGGCGGAGC
TCCGGTTGCAGCTGCCGGCCCCATGGACATACCCACTGAGGGCCCACTCACCATTGACATTTCCACCA
GGCCAAGGGGATCCAGAGCGGGACCCCGCTGACTGCCTGGAGCGCATTGGATGGAGACGTTCCACCGTC
ATTCCTTCTCAGGTCACGTTTGCCTCAGGCAGCACAGTCTGGAGGTGACCAAGCCACTCTCCAAGTGGC
TAAAGGACCCAGGGCACTGAAAAGCAGGTGTCCAGTCGAGCAGAAAAGTGTGGCATCAGCCCTACAC
CCCACCTGTACCTGTCGCCAGCACCAATGTGCTCATGCTCTACTCCAACCGGCCTCAGGAGCAGAGGCGAG
CTAGGGGGCGCCACTTTGCTTTGGGAAGCTGAGAGCTCCTGGCGGGCCAGGAGGGACAGCTGTCTGTAG
AGAGGGCGGATGGGGCAGAAGGCAACGCCGACATCATTGCCAGACAGAAGCCAAGTGTGAGGAGGT
CAAGTTCAGGTGGACTTCAACCTGATTGGCTGGGGCTCCTGGATCATCTACCCAAGCAGTACAATGCC
TATCGCTGTGAGGGCAGTGTCTAACCTGTGGGGAGGAGTTTCATCCTACCAACCTGCCTACATCC
AGAGCCTGCTGAAACGATACCAACCCACCGGTTCTTCCACGTGCTGTGCCCCCGTGAAGACCAAGCC
ACTGAGCATGCTTTATGTGGACAATGGCAGGGTCTCCTGGAACACCACAAGGACATGATTGTGGAGGAG
TGTGGTGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



Protein Sequence: >MR226998 representing NM_013611
Red=Cloning site Green=Tags(s)

MSAHSRLILLQACWALLHPRAPTAALPLWTRGQPSSPSPLAYMLSLYRDPLPRADIIRSLQAQDVDT
 GQNWTFTFDFSFLSQEEDLVWAEIQLPMPDIPTEGLTIDIFHQAKGDPERDPADCLERIWMTFTV
 IPSQVTFASGSTVLEVTKPLSKWLKDPRALEKQVSSRAEKQWHQPYTPPVVASTNVLMLYSNRPQEQRQ
 LGGATLLWEAESSWRAQEGQLSVERGGWRRQRHHL PDRSQLCRRVKFQVDFNLIGWGSWIIYPKQYNA
 YRCEGECFNPVGEFHPNTHAYIQSLLKRYQPHRVPSTCCAPVKTKPLSMLYVDNGRVLLEHHKDMIVEE
 CGCL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1303_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_013611

ORF Size: 1062 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_013611.5](#)

RefSeq Size: 2094 bp

RefSeq ORF: 1065 bp

Locus ID: 18119

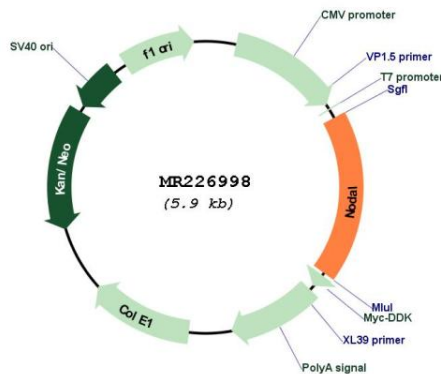
UniProt ID: [P43021](#)

Cytogenetics: 10 32.21 cM

MW: 40.9 kDa

Gene Summary: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate the mature protein, which regulates early embryonic development. Homozygous knockout mice for this gene exhibit early embryonic lethality, while expression of a hypomorphic allele results in defects in anteroposterior and left-right patterning. [provided by RefSeq, Aug 2016]

Product images:



Circular map for MR226998